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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,356	09/22/2003	Vasant R. Choudhary	4062-87	4922

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EXAMINER

WALLER, ROBIN REGINA

ART UNIT	PAPER NUMBER
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1626

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/665,356	<b>Applicant(s)</b> CHOUDHARY ET AL.	
	<b>Examiner</b> Robin R. Waller	<b>Art Unit</b> 1626	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 8/23/04.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

Claims 1-11 are pending

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1- 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedrich et al. Applicants teach a process for the liquid phase epoxidation of a normally liquid olefinic compound by an aqueous or anhydrous organic

Art Unit: 1626

hydroperoxide using a solid catalyst comprising nano-size gold particles, the process of comprising a liquid mixture comprising I and II with III in a stirred batch and then removing the catalyst from the reaction mixture and separating the reaction products and unconverted reactants from the reaction mixture. (See Claim 1)

**Determination of the scope and content of the prior art (MPEP §2141.01)**

Friedrich et al. teach a process for the separation of a catalyst employed in the epoxidation or hydroxylation of an olefinic compound with a peroxy compound in a reactor, distilling off the epoxidized or hydroxylated product and separation of the catalyst from the distillation residue containing said catalyst and high boiling organic compounds, said catalyst being a compound of a transition metal, the improvement comprising introducing the distillation residue into a bed of fluidized inert solid particles, burning the organic compounds of said distillation residue with an oxygen containing gas while in contact with said fluidized particles and separating fluidized particles containing a compound of the metal employed in the catalyst from the waste gas of said burning. ( see page 8, column 9, lines 50-67, claim1). Friedrich et al. also teaches the separating the

Art Unit: 1626

aqueous solution from said inert solid particle ( see page 8. column 10 ,line 43-46, claim 12)

**Ascertainment of the difference between the prior art and the instant claims**

**(MPEP §2141.02)**

The difference between the prior art of Friedrich et al. and the instantly claimed process is that the Friedrich et al. does not teach the catalyst as being nickel instead of the transitional metal for the catalyst as being gold (Au).

**Finding of prima facie obviousness--rational and motivation (MPEP §2142-2413)**

However, Friedrich et al. teach an analogous transitional metal which is gold. Therefore, the instant compound is prima facie obvious from the teachings of Friedrich et al. One of ordinary skill in the art would have known to use gold as the catalyst. The motivation is from the teaching of Friedrich et al. that the catalyst may perform in the same manner as the instant invention.

In the absence of unexpected results, one skilled in the art would expect that the instant claims which are analogous to the Friedrich et al process claims are, prima facie. The motivation to make claimed compound derives from the expectation that structurally similar compounds, in this case catalyst chosen from

Art Unit: 1626

aqueous solution from said inert solid particle ( see page 8. column 10 ,line 43-46, claim 12)

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In the absence of unexpected results, one skilled in the art would expect that the instant claims which are analogous to the Friedrich et al process claims are, prima facie. The motivation to make claimed compound derives from the expectation that structurally similar compounds in this case catalyst chosen from transitional metals, are generally expected to have similar properties and have

Art Unit: 1626

similar utilities. In re Gyurik, 596 F. 2d 1012, 201 USPQ 552 (CCPA 1979). The explicit generic teaching of Friedrich et al. together with the enabled examples would have motivated one skilled in the art to modify the known catalyst with such generic teaching with the expectation that they would all have similar activity as taught by Friedrich et al.

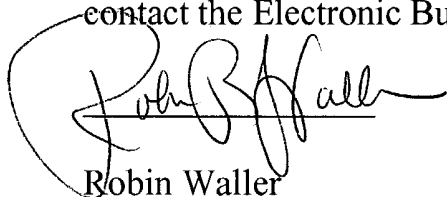
### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robin R. Waller whose telephone number is (571) 272-2901. The examiner can normally be reached on Monday through Friday between 8-5 pm.

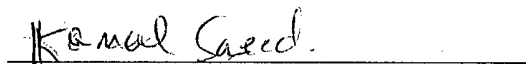
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph McKane can be reached on (571) 272- 0699. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1626

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robin Waller  
Patent Examiner 1626  
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for  
Joseph McKane  
Supervisory Patent Examiner 1626  
United States Patent and Trademark Office